

chain-shortened polynucleotide or salt thereof formed from two chain-shortened polynucleotides or salts thereof which are capable of forming a double strand.

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19. (new) The double stranded chain-shortened polynucleotide or salt thereof according to Claim 18, wherein the two chain-shortened polynucleotides capable of forming a double strand are selected from the group consisting of polyinosinic acid and polycytidylic acid, polyadenylic acid and polyuridylic acid, polyinosinic acid analogue and polycytidylic acid, polyinosinic acid and polycytidylic acid analogue, polyinosinic acid analogue and polycytidylic acid analogue, polyadenylic acid analogue and polyuridylic acid, polyadenylic acid and polyuridylic acid analogue, and polyadenylic acid analogue and polyuridylic acid analogue.

REMARKS

Claims 1 to 13, as amended, and new claims 14 to 19 appear in this application for the Examiner's review and consideration. The new claims are directed to preferred embodiments of the invention. The new claims and amendments are fully supported by the specification and the claims as originally filed. Therefore, there is no issue of new matter. Substitute claim pages are attached for the convenience of the Examiner.

Applicants submit that the entire application is in condition for allowance, early notice of which would be appreciated.

No fees are believed to be due for the filing of this Preliminary Amendment. Should any fees be required, however, please charge such fees to Deposit Account No. 501561.

Respectfully submitted,

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Amended claims for U.S. National Stage Patent Application corresponding to
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1. (amended) A chain-shortened polynucleotide or salt thereof,
[characterized in that the] comprising phosphodiester bonds, wherein up to about 3 percent of the phosphodiester bonds are [proportion of a] 2'-5' phosphodiester bonds [is up to 3% based on the whole phosphodiester bonds].
2. (amended) The chain-shortened polynucleotide or salt thereof according to [Claim] claim 1, wherein the polynucleotide is polyinosinic acid or analogue thereof, polycytidyllic acid or analogue thereof, polyadenylic acid or analogue thereof, or polyuridylic acid or analogue thereof.
3. (amended) The chain-shortened polynucleotide or salt thereof according to [Claim] claim 1 [or 2], wherein the polynucleotide or salt thereof has an average chain length [is] of between about 0.1 k bases and about 1 k bases.
4. (amended) [A] The chain-shortened polynucleotide or salt thereof according to [any one of Claims] claim 1 [to 3], wherein the polynucleotide or salt thereof [which] is in the form of a double stranded chain-shortened polynucleotide or salt thereof formed from two chain-shortened polynucleotides or salts thereof which are capable of forming a double strand.
5. (amended) The double stranded chain-shortened polynucleotide or salt thereof according to [Claim] claim 4, wherein the two chain-shortened polynucleotides capable of forming a double strand are selected from the group consisting of polyinosinic acid and polycytidyllic acid, polyadenylic acid and polyuridylic acid, polyinosinic acid analogue and polycytidyllic acid, polyinosinic acid and polycytidyllic acid analogue, polyinosinic acid analogue and polycytidyllic acid analogue, polyadenylic acid analogue and polyuridylic acid, polyadenylic acid and polyuridylic acid analogue, and polyadenylic acid analogue and polyuridylic acid analogue.
6. (amended) A method for preparing the chain-shortened polynucleotide or salt thereof, [according to any one of Claims 1 to 3 characterized in that] the method comprising reacting a polynucleotide or salt thereof [is reacted] in a solution at about pH

7 to about pH 10 and at temperature between about 20 and about 110°C to shorten the chain, thereby forming a chain-shortened polynucleotide or salt thereof, comprising phosphodiester bonds, wherein up to about 3 percent of the phosphodiester bonds are 2'-5' phosphodiester bonds.

7. (amended) A method for preparing the chain-shortened polynucleotide or salt thereof, [according to any one of Claims 1 to 3 characterized in that] the method comprising treating a polynucleotide or salt thereof [is treated] with a phosphodiesterase for chain-shortening, thereby forming a chain-shortened polynucleotide or salt thereof, comprising phosphodiester bonds, wherein up to about 3 percent of the phosphodiester bonds are 2'-5' phosphodiester bonds.

8. (amended) A composition comprising a complex formed from a carrier effective for introducing a medicament into a cell and a chain-shortened polynucleotide or salt thereof [according to any one of Claims 1 to 3 or a double stranded chain-shortened polynucleotide or salt thereof according to Claim 4 or 5] as an essential ingredient, wherein the chain-shortened polynucleotide or salt thereof comprises phosphodiester bonds, such that up to about 3 percent of the phosphodiester bonds are 2'-5' phosphodiester bonds.

9. The composition according to Claim 8, wherein the carrier effective for introducing a medicament into a cell is a positively charged carrier.

10. The composition according to Claim 9, wherein the positively charged carrier is a cationic liposome.

11. The composition according to Claim 8 wherein the carrier effective for introducing a medicament into a cell is a carrier formed from 2-O-(2-diethylaminoethyl)carbamoyl-1,3-O-dioleoyl glycerol and a phospholipid as essential constituent components.

12. (amended) The composition according to [any one of] Claim[s] 8 [to 11], wherein the composition [which] is in the form of a pharmaceutical preparation.

13. The composition according to Claim 12, wherein the pharmaceutical preparation [is] comprises an interferon inducing agent, immune activating agent, intracellular nuclease activating agent, cancer treating agent or preventive agent, or hepatitis treating agent or preventive agent.

14. (new) The method according to 6, wherein the polynucleotide is polyinosinic acid or analogue thereof, polycytidylic acid or analogue thereof, polyadenylic acid or analogue thereof, or polyuridylic acid or analogue thereof.

15. (new) The method according to claim 7, wherein the polynucleotide is polyinosinic acid or analogue thereof, polycytidylic acid or analogue thereof, polyadenylic acid or analogue thereof, or polyuridylic acid or analogue thereof.

16. (new) The composition according to claim 8, wherein the polynucleotide is polyinosinic acid or analogue thereof, polycytidylic acid or analogue thereof, polyadenylic acid or analogue thereof, or polyuridylic acid or analogue thereof.

17. (new) The composition according to claim 8, wherein the polynucleotide or salt thereof has an average chain length of between about 0.1 k bases and about 1 k bases.

18. (new) The chain-shortened polynucleotide or salt thereof according to claim 8, wherein the polynucleotide or salt thereof is in the form of a double stranded chain-shortened polynucleotide or salt thereof formed from two chain-shortened polynucleotides or salts thereof which are capable of forming a double strand.

19. (new) The double stranded chain-shortened polynucleotide or salt thereof according to Claim 18, wherein the two chain-shortened polynucleotides capable of forming a double strand are selected from the group consisting of polyinosinic acid and polycytidylic acid, polyadenylic acid and polyuridylic acid, polyinosinic acid analogue and polycytidylic acid, polyinosinic acid and polycytidylic acid analogue, polyinosinic acid analogue and polycytidylic acid analogue, polyadenylic acid analogue and polyuridylic acid, polyadenylic acid and polyuridylic acid analogue, and polyadenylic acid analogue and polyuridylic acid analogue.